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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,474	08/21/2003	Jamie Wakeam	003797.00617	8477

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EXAMINER	
MARIAM, DANIEL G	
ART UNIT	**PAPER NUMBER**
2624	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/01/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/646,474	WAKEAM ET AL.	
	Examiner	Art Unit	
	DANIEL G. MARIAM	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *See Continuation Sheet*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :1/20/04,3/11/04,5/13/04,6/25/04 & 4/13/06.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claim 12 recites "An software operating environment . ." which is directed to non-statutory subject matter. A computer software claimed as computer listings per se, i.e., the descriptions or expressions of the programs/software, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. Accordingly, the claim is merely software per se and is non-statutory.

Since claims 13 and 14 directly or indirectly depend on claim 12, they are also rejected under 35 U.S.C. 101, for the same reason set forth above for claim 12.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitation "returning control of the first processing thread to the software application". What is the purpose of returning control of the first processing thread to the

software application? Is there a particular control information provided to the first processing thread when the process is first initiated? A similar limitation also occurs in claim 2. Please clarify.

Since claims 7-11 and 3-6 directly or indirectly depend on claims 1 and 2 respectively, they are also rejected under 35 U.S.C. 112, second paragraph, for the same reasons set forth above for claims 1 and 2.

5. Claims 15-18 recite the limitation "The software operating environment"" in line 1. The prior claim language does not recite a software-operating environment. There is insufficient antecedent basis for this limitation in the claims.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 7-8 and 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Rainey, et al (5,799,315).

With regard to claim 1, as best understood, Rainey, et al discloses a method of analyzing electronic ink (See for example, Figs. 8-12), comprising: receiving, from a software application running on a first processing thread, document data for a document containing electronic ink content (See for example, item 130: 190, in Fig. 2 or item 800, in Fig. 8); employing the first processing thread to provide the document data to an electronic ink analysis, i.e., tagging or

modifying, process for analyzing on a second processing thread (item 160, in Fig. 2 or item 805, in Fig. 8); returning control of the first processing thread to the software application (which is done *via* processor 110, in Fig. 2); receiving results of the analysis process and reconciling the results of the analysis process with current document data for the document (See item 180, in Fig. 2; and col. 5, line 47 – col. 6, line 12; and Fig. 12).

With regard to claim 7, the method recited in claim 1, wherein the document data includes ink content non-ink content, i.e., graphical content, of the document (See for example, col. 1, lines 63-66).

With regard to claim 8, the method recited in claim 7, wherein at least a portion of the electronic ink content annotates, i.e., notation, the non-ink content (See for example, col. 4, lines 46-51).

With regard to claim 11, a computer-readable medium including computer-executable instructions stored thereon for performing the method of claim 1 (See for example, col. 3, lines 21-30).

With regard to claim 12, an software operating environment for analyzing electronic ink (See for example, Fig. 2), comprising: a software application that maintains a document containing document data including electronic ink data (See for example, item 800, in Fig. 8; and item 130, in Fig. 2); an ink analysis process, i.e., tagging or modifying, for analyzing electronic ink (See for example, item 805, in Fig. 8; and item 160, in Fig. 2); and an ink analysis tool, i.e., event detector, that receives the document data containing electronic ink data from the software application, provides the document data to the electronic ink analysis process to analyze, and

returns results produced by the analysis process to the software application (See for example, col. 5, line 47 – col. 6, line 12; and Figs. 8-9)

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1-4, 6-7 and 9-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simske (7,106,905).

With regard to claim 12, Simske discloses an software operating environment for analyzing electronic ink (See for example, Figs. 1 & 3-4), comprising: a software application that maintains a document containing document data including electronic ink data (See for example, item 104 which stores a software, in Fig. 1); an ink analysis process, i.e., OCR, for analyzing electronic ink (See item 112, in Figs. 1 and 3); and an ink analysis tool that receives the document data containing electronic ink data from the software application, provides the document data to the electronic ink analysis process to analyze, and returns results, i.e., recognition results, produced by the analysis process to the software application (See col. 5, line 601 through col. 6, line 24; and item 104, in Fig. 1). Although Simske does not explicitly use the language "ink analysis tool", it would have been obvious if not inherent that the processor 102 shown in Figure 1 is configured to communicate data to and from the memory "104" and generally controls operation of the system illustrated in Fig. 1, and once the document data is

scanned and stored in memory 104 via processor 102, this document is obviously transmitted to the OCR 112. Additionally, the OCR 112 would not be able to recognize any text contained in the document without receiving the document that is stored in memory 104.

With regard to claim 1, as best understood, a method of analyzing electronic ink, comprising: receiving, from a software application running on a first processing thread, document data for a document containing electronic ink content (item 104:108, in Fig. 1); employing the first processing thread to provide the document data to an electronic ink analysis process, i.e., OCR or character recognition, for analyzing on a second processing thread (See item 110, in Fig. 1); returning control of the first processing thread to the software application (which is done via processor 102); receiving results of the analysis process, and reconciling, i.e., comparing or conforming, the results of the analysis process with current document data for the document (See for example, Fig. 3 and the associated text).

With regard to claim 2, as best understood, the method recited in claim 1, further comprising: receiving the reconciled analysis results from the software application running on the first processing thread; employing the first processing thread to provide the reconciled analysis results to a second electronic ink analysis process, i.e., POST-OCR, for analyzing on a third processing thread (See item 114, in Fig. 1; and Figs. 3-4); returning control of the first processing thread to the software application (which is done via processor 102); receiving results of the second analysis process, and reconciling the results of the second analysis process with current document data for the document (See for example, Fig. 4 and the associated text).

With regard to claim 3, the method recited in claim 2, wherein the first analysis process is an electronic ink layout (See for example, col. 6, lines 54-67) and classification, i.e., text and non-text, analysis process and the second analysis process is a recognition process (See col. 5, line 60 through col. 6, line 19).

With regard to claim 4, the method recited in claim 2, wherein the third processing thread is the same as the second processing thread (item 110, in Fig. 1).

With regard to claim 6, the method recited in claim 2, wherein the second analysis process is a recognition process with a first stage for recognizing electronic ink data designated to be in a first language, i.e., non-native language, and a second stage for recognizing electronic ink data designated to be in a second language, i.e., native language (See for example, item 114, in Fig. 4, and its associated text).

With regard to claim 7, the method recited in claim 1, wherein the document data includes ink, i.e., text, content non-ink content, i.e., non-text, of the document (See for example, col. 6, lines 4-5).

With regard to claim 9, the method recited in claim 1, further comprising: creating a data structure for the document data received from the software application, and providing the data structure to the first analysis process (See for example, col. 6, lines 4-9).

With regard to claim 10, the method recited in claim 9, further comprising: providing the data structure to the software application for use in maintaining the current state of the document (See for example, item 104, in Fig. 1).

With regard to claim 11, a computer-readable medium including computer-executable instructions stored thereon for performing the method of claim 1 (See col. 3, lines 47-67).

With regard to claim 13, the software operating environment recited in claim 12, wherein the software application operates on a first processing thread (See for example, item 108, in Fig. 1)); and the analysis process operates on a second thread different from the first thread, such that the software application continues to operate while the analysis process analyzes the electronic ink in the document data (See item 110, in Fig. 1).

With regard to claim 14, the software operating environment recited in claim 13, wherein the ink analysis tool reconciles the results produced by the analysis process with current document data for the document (See item 112 or 114, in Fig. 3-4).

With regard to claims 15-18, claim 2 encompasses the limitations of these claims, and are rejected the same as claim 2. Thus, argument analogous to that presented above for claim 2 is applicable to claims 15 -18.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent Numbers: 5587560, 5600834 and 6240414; and US Patent Application Publications: 2002/0133507 and 2002/0191452

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL G. MARIAM whose telephone number is 571-272-7394. The examiner can normally be reached on M-F (7:00-4:30) FIRST FRIDAY OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MATTHEW BELLA can be reached on 571-272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DANIEL G MARIAM
Primary Examiner
Art Unit 2624

February 22, 2007